



Current perspectives on safety culture in industry

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Overview

1. Defining culture as understanding of reality
2. Images of safety culture: common approaches
3. Culture as a process: the development of culture
4. Regulatory issues

DEFINING CULTURE

A definition of culture

“Culture is a fuzzy set of attitudes, beliefs, behavioural conventions, and basic assumptions and values that are shared by a group of people, and that influence each member’s behaviour and each member’s interpretations of the ‘meaning’ of other people’s behaviour”

Spencer-Oatey, 2000

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In a nutshell: culture influences what people see, hear, feel, say and do

IMAGES OF SAFETY CULTURE: COMMON APPROACHES

Culture vs. safety culture

- Culture is a value free concept
- Safety has a normative element to it > safety and *unsafety*

Safety culture perspectives

1. Culture as a tribe > anthropological perspective
2. Culture as a staircase > pragmatic perspective
3. Culture as a number > analytical perspective
4. Culture as a process > sensemaking and agreement

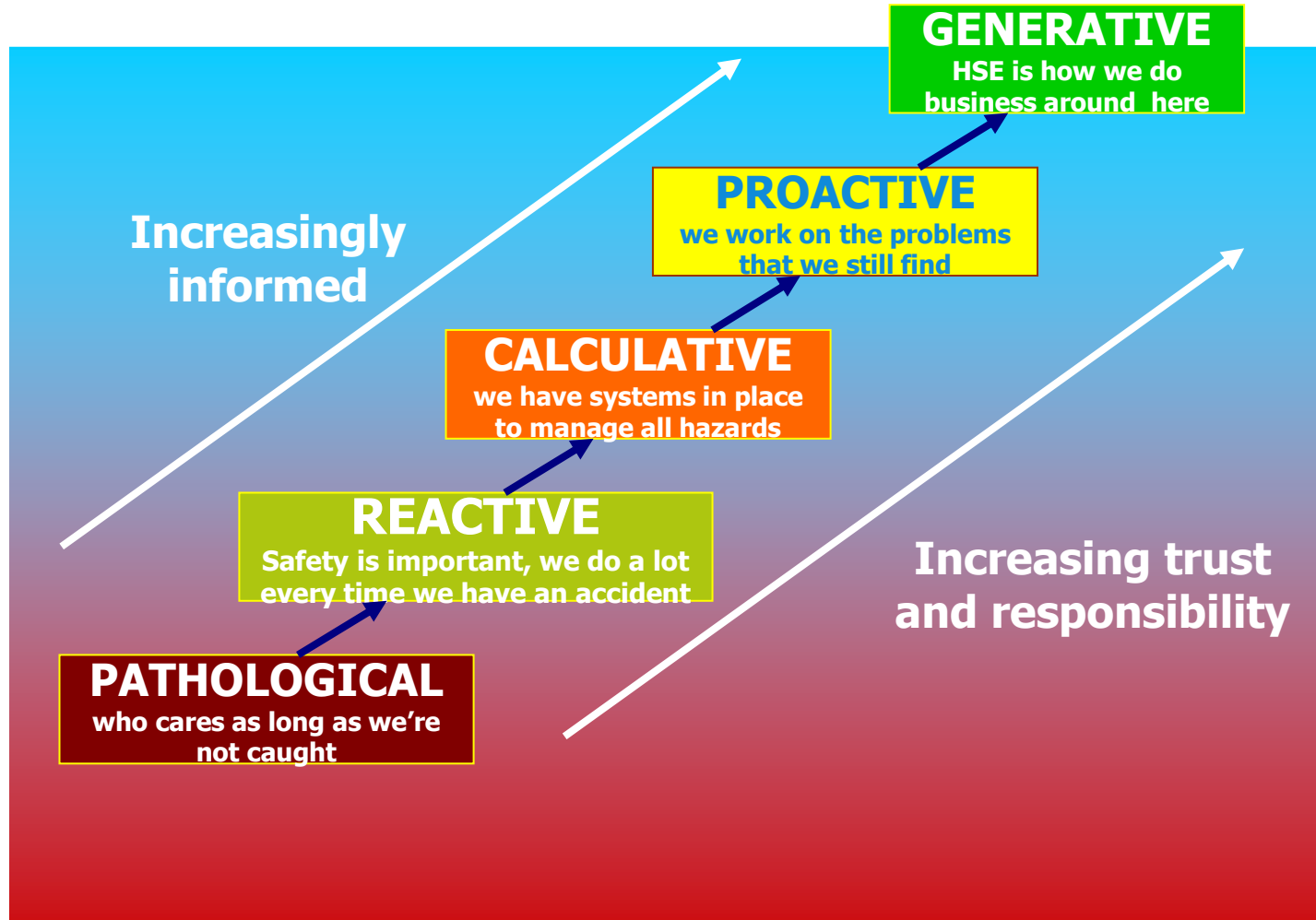
Culture as a tribe



Anthropological perspective

- Aimed at understanding, not judging or evaluating (at least not for a while)
- Method: field research (observations, interviews, focus groups, document analysis, questionnaire)
- 'Thick descriptions' > a wealth of qualitative data
- Popularity is rather small (although many use it in some way)
- Drawbacks:
 - Time consuming
 - Much qualitative (textual) data > hard to summarise
 - No real surprises > 'Is this all?'
 - What about comparisons?
 - How to compare with norm(s)?

Culture as a stairway



Pragmatic perspective: levels of safety culture maturity

- Aimed at improvement > 'What can we do better?'
- Based on 'expert' opinion > no real scientific underpinning or actual proof
- Method: behaviourally anchored rating scales (BARS)
- Quantifications express rank order (maturity)
- Most popular approach in the Netherlands > companies as well as inspectorates use it (to rate companies)
- Drawbacks:
 - What do we actually assess?
 - Culture can become a quick fix
 - Often misused for e.g. benchmarking

Culture as a number

$$D = \frac{1}{c} \frac{1}{\ell} \frac{d\ell}{dt} = \frac{1}{c} \frac{1}{P} \frac{dP}{dt}$$
$$D^2 = \frac{1}{P^2} \frac{P_0 - P}{P} \sim \frac{1}{P^2} \quad (1a)$$
$$D^2 = \frac{\kappa \varrho}{3} \frac{P_0 - P}{P_0} \sim \frac{1}{3} \kappa \varrho \quad (2a)$$
$$D^2 \sim 10^{-53}$$
$$\varrho \sim 10^{-26}$$
$$P \sim 10^8 \text{ G.J.}$$
$$\tau \sim 10^{10} (10^{11}) \text{ y}$$

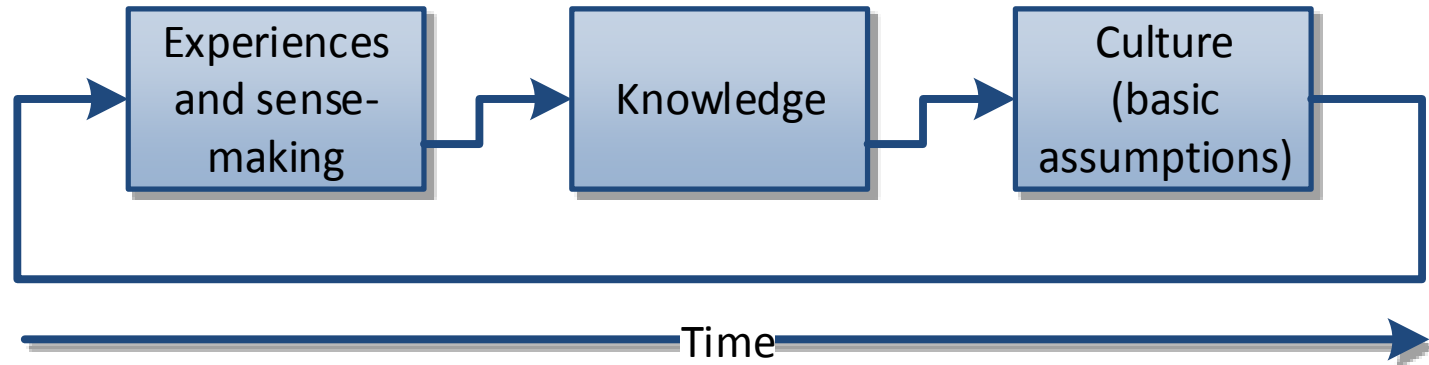
Analytical perspective

- Aimed at description (and diagnosis?)
- Questionnaire-based > attitudes, perceptions (snapshot)
- Quantifications are used to calculate means, variances, and to carry out (advanced) statistical analyses
- Most popular approach with academics (and PhD students) > perception of priority of safety = safety climate
- Drawbacks:
 - No context
 - What does a high or low score actually mean?
 - Limited source of information

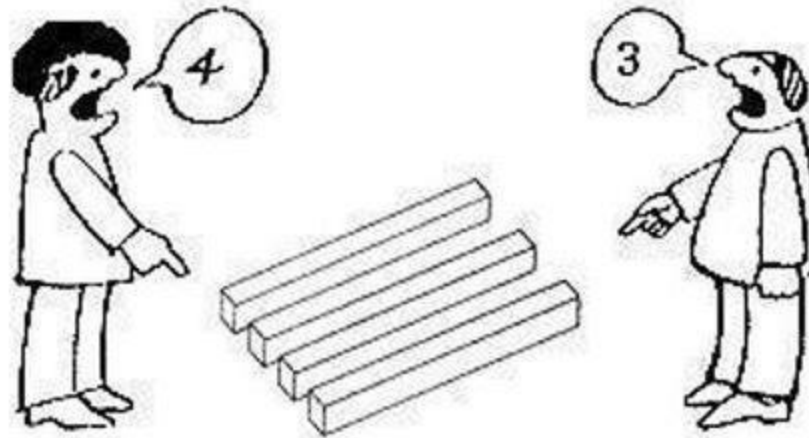


CULTURE AS A PROCESS

The development of culture



Culture as a product of sensemaking and agreement



Another definition of (organisational) culture

“Organizational culture is the set of common norms, values and world views that develop in an organization when its members interact with each other and its context”

Bang, 1999

REGULATORY ISSUES

Regulatory relevance

- Regulator should understand the concept of safety culture to be able to promote it, advise on it and provide support for it?
- Regulator should know its own (safety) culture when judging a company's?
- Regulator should be able to conduct an open, meaningful dialogue with clients about safety culture?



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